

# **North Carolina Department of Agriculture and Consumer Services**

## **IT Plan**

**2007-2009 Biennium**



# **NC Department of Agriculture and Consumer Services IT Plan for 2007-2009 Biennium**

## **SECTION 1: SUMMARY OF PLAN DRIVERS**

### **1.1 Departmental/Agency strategic business initiatives and major business Requirements**

Operate regulatory and service programs that ensure the availability of life-sustaining food and natural fiber, free of adulteration and contamination, and produced in a manner consistent with environmentally sound production practices. Programs are operated to benefit consumers and agricultural producers, to protect the environment, health, and economic well being of all North Carolina citizens and business enterprises.

The biggest challenge at this point in time is to provide electronic government services to those who wish to use the technology, while staying focused on serving customers and complying with state standards. The Department must also continue to assess the benefits versus the costs associated with technological changes.

### **1.2 Requirements for transitioning existing IT activities/resources, including potential impact from consolidation and estimated costs for transitions**

#### **1.2a Current Projects**

##### **Departmental Licensing System**

Description: Manages and regulates the applications for licenses for performing certain types of businesses such as applying pesticides, selling seeds,, selling fertilizer. There are approximately 80,000 licensees in the State of North Carolina that are regulated by the NC Department of Agriculture and Consumer Services.

Objective: Allow customers to electronically renew licenses and registrations, take exams, view relevant information or work with an agency employee by clicking on a link on a website from any computer or PDA.

Funding needs: \$ 508,902 in appropriations is needed to fund the Departmental Licensing System project for consultants (analysts and programmer).

The Department is in the beginning phases of consolidation of Business Application Technologists and servers.

## **NAIP Orthophotography Project**

Description: The goals of this project are to partner with USDA: Farm Service Agency, acquire NAIP 4 band digital imagery yearly, make available to other state agencies and local governments and integrate the NAIP Imagery into the existing NCDA&CS Multi-Hazard Threat Database.

Objective: Google Earth will provide a common operating picture and situational awareness to emergency first responders in the following agencies:  
NC Dept. of Health and Human Services: Office of Emergency Medical Services, Public Health Division, Mental Health Division  
NC Dept. of Justice: State Bureau of Investigation  
NC Crime Control & Public Safety: Emergency Management Division  
NC Dept. of Agriculture & Consumer Services: Veterinary Division, Plant Industry Division, Meat & Poultry Inspection Service, Food & Drug Division, and Emergency Programs Division

Funding needs year 1: \$225,000

Funding needs year 2: \$225,000

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### **1.3 Agency Business Plan**

#### **1.3b Applications**

##### **Agricultural Review System**

Description: Designed to store and allow immediate access to the Ag Review mail list and State Fair Press Data.

Objective: maintain

##### **Agronomic LIMS System**

Description: This system manages the data for the Soil, nematology, and Plant, Waste and Solution laboratories of the Agronomic Division.

Objective: Enhance. Finish upgrading the system to .Net and to document the system in its entirety.

Objective 2: Online entry for PALS system.

##### **Applicant Tracking v3**

Description: This system tracks information for people who apply for job vacancies in NCDA&CS.

Objective: maintain

### **Assessments System**

Description: Certain agricultural associations in the State collect an assessment for their membership. These assessments are paid to NCDA&CS, which transfers the monies to the appropriate associations. The system records and reports the fees collected.

Objective: Replace

### **Duplicating Services Chargeback System**

Description: This system tracks the “chargeback” costs for duplicating services used by all Divisions in NCDA&CS. These services are located in the Agricultural Statistics Division but the costs are charged back to the requesting Division.

Objective: maintain

### **Feed Lab System**

Description: This system receives feed sample work assignments for the Feed Lab from the Feed Transcript System, maintains lab results for the lab’s analysis of the samples, and returns the results to the Feed Transcript System.

Objective: Replace with a LIMS (Laboratory Information Management System)

### **Feed Registration System**

Description: This system maintains the Feed Registration Master File which contains information on feed manufacturers and brands registered in NC. An ingredient file is also maintained with valid ingredients that can be guaranteed in the feed brands.

Objective: Replace with a LIMS

### **Feed Report System**

Description: This system assesses penalties on feed samples analyzed by the Feed Lab that are not in compliance with the guarantees; produces reports of penalty and non-penalty samples for manufacturers, dealers, the feed administrator

Objective: Replace with a LIMS

### **Feed Tonnage System**

Description: This system maintains records of inspection fees charged to feed and pet food manufacturers who sell their products in North Carolina. It also produces reports and labels.

Objective: Rewrite the system in VB.Net

### **Feed Transcript System**

Description: This system maintains data about feed samples that are collected in the state and analyzed to insure consumers that the products do contain what they are guaranteed to contain.

Objective: Replace with LIMS

### **Fertilizer Inspector Reporting System**

Description: Fertilizer Inspectors provide regulatory inspection of fertilizer and lime offered for sale in North Carolina. The Fertilizer System tracks the number of inspections by county and companies.

Objective: Maintain

### **Fertilizer Lab System**

Description: This system receives feed sample work assignments for the Feed Lab from the Feed Transcript System, maintains lab results for the lab's analysis of the samples, and returns the results to the Feed Transcript System.

Objective: Replace with LIMS

### **Fertilizer Registration System**

Description: This system maintains the Fertilizer Registration Master file, which contains registration information for all fertilizer and limestone manufacturers and brands registered in NC.

Objective: Replace with LIMS

### **Fertilizer Tonnage System**

Description: This system maintains records of inspection fees charged to fertilizer manufacturers who sell their products in North Carolina. It also produces reports and labels.

Objective: Replace in 2007. This will also impact Feed Tonnage, Fertilizer Tonnage System, Limestone Tonnage and Hors Feed Assessments.

### **Fertilizer Transcript System**

Description: This system maintains data about fertilizer samples taken for analysis. It receives guarantee information from the Fertilizer Registration System and forwards this to the Fertilizer Lab System. It also receives lab result data from the Fertilizer

Objective: Replace with LIMS

### **Food Distribution Tracking System**

Description: Responsible for tracking acquisition, storage and distribution of food from the USDA to public schools, private schools, charitable institutions, disaster organizations, non-profit summer camps for children and nutrition programs for the elderly.

Objective: Enhance to make the front end accessible through a public web browser instead of using VPN. This is for internal employees to NCDA&CS.

### **Gypsy Moth System**

Description: The object of the Plant Protection Section is to protect agriculture and the environment from quarantine plant pests such as gypsy moth. In cooperation with federal and private partners, this section implements a trapping program to assess the potential in

Objective: Maintain

### **Horse Feed Assessments**

Description: This system collects and processes horse feed dealer and invoice information relative to assessments paid by the dealers on all feed sold in NC.

Objective: Replace with LIMS

### **Limestone Tonnage System**

Description: This system maintains records of inspection fees charged to limestone manufacturers who sell their products in North Carolina. It also produces reports and labels.

Objective: Replace with LIMS

### **Market News Grain**

Description: This system provides an interactive data entry interface to collect, review, store and report weekly market prices of grain in NC and surrounding markets. A Weekly Newsletter and other reports are produced.

Objective: Maintain

### **Market News Livestock System**

Description: This system provides an interactive data entry interface to collect, review, store, and report weekly market prices of livestock sold in NC and surrounding markets. A Weekly Newsletter and other reports are produced.

Objective: Maintain

### **Motor Fuels Registration System**

Description: This system maintains registration data for manufacturers and brands of gasoline and diesel fuel to be sold in NC.

Objective: Replace

### **NCForay**

Description: The objective of the Plant Protection Section is to protect agriculture and the environment from quarantine plant pests such as boll weevil. This system incorporates reported cotton acreage, invoices cotton producers based on the current acreage assessment.

Objective: Maintain

### **Office Supplies Inventory**

Description: This system keeps track of the office supplies in the NCDA&CS stock room in order to predetermine when new shipments are needed, and to

charge the divisions based on their usage. The system provides reports with various accounting information

Objective: Maintain

### **Pesticide Activity Inspector System**

**Description:** This system tracks inspections made by Pesticide Inspectors in the field. Various reports are available to management to track the number of inspections done.

**Objective:** Enhance

### **Pesticide Recertification System**

**Description:** This system maintains data for courses taken and credits earned by licensed commercial and private pesticide applicators, required for their recertification. Transcripts are printed to notify licensees of their status and any additional credits needed.

**Objective:** Maintain

### **Pesticide Registration**

**Description:** The Pesticides Section of the Food & Drug Protection Division regulates the production and sale of pesticides in the state. Any company that sells or distributes pesticides in the state must register those products with the NCDA&CS.

**Objective:** Maintain

### **Seed Analysis System**

**Description:** The Plant Industry Division analyzes samples of seeds sold in the state, in order to protect the consumers. This system records, calculates, and prints reports pertaining to the data generated by this analysis.

**Objective:** Maintain

### **Seed Assessments System**

**Description:** The NCDA&CS receives quarterly reports of seeds distributed in the state by seed dealers. The dealers are required to pay a fee based on the amounts sold. This system maintains this data and generates reports and labels.

**Objective:** Enhance



### **Seed Inspector Reporting System**

Description: Seed Specialists provide regulatory inspection of seed offered for sale in North Carolina. The program tracks the number of inspections and stop sales.

Objective: Maintain

### **Setoff Debt Collection System**

Description: This system provides data entry capabilities for entering set-off debt collection data for NCDA & CS. After completion of keying the data, it is bundled into a text file which will subsequently be sent to the NC Dept. of Revenue.

Objective: Maintain

### **Soft Serve System**

Description: NCDA&CS conducts inspections of frozen dessert establishments and takes samples, which are analyzed to assure consumers that the products they purchase are wholesome and free of bacterial contamination.

Objective: Maintain

### **Standards Lab Scheduling System**

Description: The Standards Lab tests weights and measuring devices for accuracy. This system allows the Standards Lab personnel to schedule device tests in advance, to track those devices while they are in the various stages of testing, and to invoice customers.

Objective: Replace the application with an Access database and a Visual Basic front end.

### **State Fair Advanced Ticket Sales**

Description: This system provides for the processing of orders received for Advanced Tickets Sales for the NC State Fair and the Mountain State Fair. Orders are received through the Yahoo Store Front on the Internet or through the mail. Labels and reports are generated using this system.

Objective: Retired

### **State Fair Arts and Photo Exhibition**

Description: Records and tracks entries and exhibitors for the Arts and Photo Exhibition

Objective: Maintain

### **State Fair Entry System**

Description: Tracks exhibitors in the various competitions not covered by other database applications with the fees collected and prepare various reports.

Objective: Maintain

### **State Fair Event Management System**

Description: The State Fair Event Management System maintains event schedules and invoice information for events held at the North Carolina State Fair.

Objective: Maintain

### **State Fair Folk Festival**

Description: This application records and tracks individual and group entries to the Folk Festival and the judges scoring of the competition.

Objective: Maintain

### **State Fair Livestock Exhibition**

Description: The Livestock Exhibition Database Application records and tracks entries and exhibitors, prizes, calculates premiums won and prepares a file to be uploaded to the NCAS for the purpose of printing premium checks.

Objective: Maintain

### **State Mail List System**

Description: This system manages mailing lists for NCDA&CS.

Objective: gradual phase out

### **Structural Pest Automated Inspection System**

Description: The application collects and maintains data of inspection activities which involves processing inspection records, scheduling of inspections, notification of licensees, providing the information upon which cases are based and case tracking processing.

Objective: Maintain

### **Structural Pest Control Inspection and Billing System**

Description: This system provides a base of all inspection and reinspection reports for retrieving information from which management can make its decisions. It is designed to provide an efficient method for billing companies using standard accounting procedures.

Objective: Maintain

### **Structural Pest Control Recertification System**

Description: This system manages information about classes taken by pest control licensees and certified applicators. These classes fulfill the training requirements for holding a license or certification.

Objective: Maintain

### **Temporary and Part-time Payroll System**

Description: This system produces a bi-weekly payroll for the temporary and/or part-time employees in NCDA&CS, prints payroll checks and tax withholding

checks, and prints a variety of reports for accounting purposes.

Objective: To be replaced by BEACON.

### **Veterinary LIMS**

Description: Veterinary Laboratory Information Management System

Objective: Enhance.

Description: Veterinary Laboratory Information Management System

### **Witch weed**

Description: The Plant Protection Section chemically treats and survey in an attempt to eradicate Witch Weed. Witch Weed is a parasitic plant that attacks important crops. The system tracks the location of the, Control and Surveys, Eradication activities.

Objective: Enhance

### **WNC State Fair Event Management System**

Description: The State Fair Event Management System maintains event schedules and invoice information for events held at the North Carolina Western Agricultural Center.

Objective: Maintain

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### **1.3c Infrastructure Assets**

#### **1.3d Operations/IT management**

One Help Desk position did not come under the Information Technology Section of the NCDA&CS. As of July 2006, all Help Desk personnel report to the Information Technology Section.

Plant Industry is has moved to the MAN and they do not have a separate T1. They are currently saving \$15,000 per year in telecommunication cost.

We currently have seven programmer positions in the Information Technology Section. The Department has 16 positions classified as Business & Technology Application Technicians or Analysts that do not report to the Chief Information Officer in the Department's Information Technology Section. These employees work within Divisions within the Department. We are in the process of consolidating the 16 positions in the Divisions under the Information Technology Section. These 23 positions will work to meet the business needs of the Department.

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### **1.3e Human Resources**

Staffing needs:

Position: BUS AND TECH APP ANALYST

Working Title: IT PROJECT MANAGER

The Department has a need for one full time project manager to oversee various projects on a Department level.

This person would work with the Project Portfolio Management Tool which requires that any money \$100,000 and over the Department spends be put in the tool and managed. As of September 19, 2006 the Department currently has six projects in the tool. One project has been completed, one project is in closeout review phase, 3 projects are registered and one project is in initiation phase. These projects need to be managed so they do not fall behind the expected delivery date.

This position would serve to support Emergency Programs grants as well as any other Division with IT grants and to do the monthly reporting as well as make sure the project is moving forward. The Department also has 54 legacy applications. Any application that needs to be rewritten or any new application that needs to be written will be put into a software package that will track the progress of the application. The project manager will see that the applications move along in a timely manner so we do suffer from project creep.

The Department also has 54 legacy applications. The Information Technology Services Section with direction from the Department's Information Resource Management Committee (IRMC) will work on the applications that need to be rewritten. This position would serve as the project manager to oversee that these projects move along in a timely fashion. This position would report to the Department's CIO.

Salary and benefits for an IT Project Manager:	80,685.00
Hardware and software:	<u>2,000.00</u>
Total:	\$82,685.00

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#### **1.4 IT specific economic-driven requirements or opportunities**

Steps toward consolidation have already taken place in the Department. All Help Desk personnel now reports to the Information Technology Services Section. One Division, Plant Industry, has given up its T1 line and is now on the MAN (Metropolitan Area Network).

Next steps are as follows:

1. Consolidate the Plant Industry Netware server with our main Netware server. This will save a new server cost as well as tape backup cost to them of approximately \$10,000 every 3 years.

2. Consolidate 16 programmer positions under the Information Technology Services Section which falls under the CIO of the Department.
3. Hire a project manager for IT grants, PPM and APM.
4. License system with over 80,000 licensees to be a web based front and capable of accepting credit card payments over the web.

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## **Section II: IT Initiatives Developed From and Aligning with Plan Drivers**

IIA: For each IT initiative, include the following content:

- a. **Name:** Departmental Licensing System
- b. **Summary:** Manages and regulates the applications for licenses for performing certain types of businesses such as applying pesticides, selling seeds,, selling fertilizer. There are approximately 80,000 licensees in the State of North Carolina that are regulated by the NC Department of Agriculture and Consumer Services.
- c. **Major objectives and benefits:** The business requirement for providing our services electronically is the use of information technology is growing throughout the State of North Carolina. Today we can renew our driver's license online. The citizens expect to be able to do the same with whatever business they do with the State such as renewing a Pesticide Applicator license or a Structural Pest Control license or a Soft serve license. This would save postage on the customer side as well as on the Department side and we all know, too, that time is a valuable asset to everyone.
- d. **Timeframe:** Start time would be 3<sup>rd</sup> quarter of 2006 and end time would be 2<sup>nd</sup> quarter of 2007.
- e. **Relationship with other agency initiatives/projects:** As mentioned earlier, this has been accomplished with DMV and license renewal. I believe that NC Environmental and Natural Resources would benefit from an online license system to apply for hunting and fishing licenses.
- f. **Relationship with statewide initiatives/projects:** Through the use of the State's tools such as Project Portfolio Management and the Application Portfolio Management tool and the addition of an IT project manager, this project will be able to be followed closely. This project can be used as a

model for other agencies that would like to offer licenses such as wildlife online.

g. **Order-of-magnitude costs:** Source of funding would be state funding one-time. The funding would be used for outside consultants.

IIB:

a. **Name:** NAIP Orthophotography Project

b. **Summary:** Detailed, current imagery is critically needed for emergency response. Response to an agroterrorist attack or naturally occurring livestock disease relies on the ability to quickly identify premises at risk of disease spread. The advantages of orthophotography are numerous and include:

1. As North Carolina makes significant efforts to implement the National Animal ID System, detailed orthophotography helps in several ways in quality control of the premises ID database. Farms not in the database can easily be identified. Imagery also serves as a vital quality control tool for premises already in the farm database; in addition to location information, the unique layout of farms for different species (cattle, swine, poultry) allow a better understanding regarding species farmed, and estimated capacity.

2. This imagery also gives responders and decision makers an understanding of the existing infrastructure and topography in the affected area. This information can be critical when estimating resources needed for response.

3. As Hurricane Katrina and other devastating weather events have shown, up-to-date orthophotography helps with damage assessments of state infrastructure, including agricultural premises, by providing a before-and-after comparison and is often the most rapid and comprehensive tool for damage assessments that can verify reports from the population in the impact area.

4. Orthophotography has numerous other non-emergency applications that benefit the state of North Carolina and the Nation.

c: **Major objectives and benefits:** The goal is to provide enhanced situational awareness and provide a better common operational picture for emergency first responders and commanders to gain access to current imagery r orthophotography for North Carolina.

Google Earth will provide a common operating picture and situational awareness to emergency first responders in the following agencies:

NC Dept. of Health and Human Services: Office of Emergency Medical Services, Public Health Division, Mental Health Divison, NC Dept. of Justice: State Bureau of Investigation, NC Crime Control & Public Safety: Emergency Management Division, NC Dept. of Agriculture & Consumer Services Divisions:

Veterinary, Plant Industry, Meat & Poultry Inspection Service, Food & Drug, and Emergency Programs.

d. **Timeframe:** Start time would July 2007 and end time would be 2<sup>nd</sup> quarter of 2009.

e. **Relationship with other agency initiatives/projects:** To partner with USDA: Farm Service Agency, acquire NAIP 4 band digital imagery yearly, make available to other state agencies and local governments and integrate the NAIP Imagery into the existing NCDA&CS Multi-Hazard Threat Database.

f. **Relationship with statewide initiatives/projects:** Google Earth will provide a common operating picture and situational awareness to emergency first responders in the following agencies:

NC Dept. of Health and Human Services: Office of Emergency Medical Services, Public Health Division, Mental Health Division

NC Dept. of Justice: State Bureau of Investigation

NC Crime Control & Public Safety: Emergency Management Division

NC Dept. of Agriculture & Consumer Services: Veterinary Division, Plant Industry Division, Meat & Poultry Inspection Service, Food & Drug Division, and Emergency Programs.

g. **Order-of-magnitude costs:** The cost will be \$225,000 in year.